

Application No. 10/500,729
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REMARKS

Applicant thanks the Examiner for the thorough consideration given the present application. Claims 1-18 are currently being prosecuted. Claims 1-6, 9-14 and 17 stand rejected. Claims 7, 8, 15, 16 and 18 stand withdrawn. The Examiner is respectfully requested to reconsider his rejections and restriction requirement in view of the amendments and remarks as set forth hereinbelow.

FINALITY OF THE LAST OFFICE ACTION

If the Examiner does not agree that the present application is in condition for allowance, it is respectfully requested that the Examiner reconsider the finality of the last office action. Claims 1-5 were not amended in the response to the Examiner's Election of Species Requirement. In addition, claims 12, 13 and 17 were only amended to place the claims in independent form. The Examiner has now relied on newly cited references in formulating rejections of claim 1-5, 12, 13 and 17. Applicant did not necessitate the new grounds of rejection. The Examiner is respectfully requested to withdraw the finality of the last office action.

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REASONS FOR ENTRY OF AMENDMENT

If the Examiner does not agree that the application is in condition for allowance and if the Examiner does not agree to withdraw the finality of the last Office Action, it is respectfully requested that the present amendment should be entered since the amendment places the application in better form for appeal. The present amendment was not presented at an earlier date in view of the fact that the Applicant did know of the new grounds of rejection and did not fully understand the Examiner's new grounds of rejection until he had an opportunity to review the Examiner's last Office Action. It is requested that the present amendment be entered into the present application.

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ELECTION OF SPECIES REQUIREMENT

The Examiner's Election of Species Requirement has been made final. It is respectfully requested that the Examiner reconsider his Election of Species Requirement. It is respectfully submitted that the claims are linked to be directed to one invention relating to a lock and key arrangement. The fact that the claims are linked was confirmed in the International Search Report wherein all of the claims were maintained in a single application. Thus, claims 1-18 should be considered in a single application. The Examiner is respectfully requested to reconsider his election of species requirement. If the Examiner does persist in his election of species requirement and does not allow a generic claim that you then permit all of the claims to be allowed in the present application, Applicant reserves the right to file divisional applications directed to the non-elected claims at a later date if he so desires.

DRAWINGS

The Examiner has approved the drawings filed on July 20, 2004 and January 19, 2006. The drawings now comply with the requirements of the USPTO. No further action is necessary.

REJECTION UNDER 35 USC 102

Claims 13, 14 and 17 stand rejected under 35 USC 102 as being anticipated by Olson, US. 2,155,734. This rejection is respectfully traversed.

At the outset, claim 13 and 17 have been amended to include a combination of elements wherein the key blade or the key blank for producing a key blade are used with a lock wherein adjacent side tumbler body segments (113, 114) in a pair are located on the same side of the key slot and are freely movable independently of each other in said side cavity so as to be individually displaced into respective elevational positions. In addition, the associated contact fingers (115, 116) in the pair are axially separated in the longitudinal direction of the key plug such that these contact portions are located at a longitudinal distance from each other on the same side of the key slot and will be positioned at elevationally specific and generally different levels when being engaged by said coded surface (203) upon insertion of said key blade (200) into said key slot (100). Thus, the side tumbler body segments (113, 114) in each pair are displaceable into a number of different positions relative to each other representing different codes. It is respectfully submitted that the Examiner must consider all of the limitations set forth in the claims as a whole.

It is respectfully submitted that claims 13, 14 and 17 are not anticipated by the prior art cited by the Examiner. As set forth in Section 2131 of the MPEP Original Eight Edition, August 2001 Latest Revision February, 2003, page 2100-70:

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Verdegaal Bros. V. Union Oil Co. Of California, 814 F2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).... “The identical invention must be shown in as complete detail as is contained in the ... claims.” Richardson v. Suzuki Motor Co., 868 F2d 1226, 1236, 9 USQP2d 1913, 1920 (Fed. Cir. 1989).

On page 5, the second full paragraph of the Examiner's Office Action it is indicated that the body segments that include a plate 18 with a longitudinal recess or aperture 20 and a second plate 19 are not connected to each other. The Examiner states that that fact that the spring 21 of Olson abuts adjacent tumbler segments is not regarded as a connection for the tumbler segments.

This conclusion is not supported by the teaching of the Olson '734 patent. More specifically, as set forth on page 2, column 1, lines 4-12:

"Thus the spring is compressed longitudinally between the ends of the apertures, and serves to press the plates outwardly from the plug in opposite directions for locking engagement in the grooves 9 to prevent the rotation of the plug. The separation of the plates is stopped when the apertures are in registration and the two plates become a tumbler which is longer than the diameter of the plug."

In addition, as set forth on page 2, column 2, lines 8-14:

"Thus the two tumbler halves become the holder for the spring in placing the spring into the plug. Since the springs are quite minute in size, considerable difficulty is often met in having the springs jump out of position, or become disarranged during the assembling of the other parts of the plug."

It is respectfully submitted that the springs 21 do provide a connection between the plates 18, 19 and thus do not anticipate the claims wherein a combination of elements include adjacent side tumbler body segments in the pair that are located on the same side of the key slot and are freely movable independently of each other in the side cavity so as to be individually displaced into respective elevational positions.

It is respectfully submitted that the prior art cited by the Examiner does not set forth each and every element as defined in the claims. Thus, the Examiner's rejection based on 35 USC 102 has been obviated.

REJECTIONS UNDER 35 USC 103

Claims 1-3, 5, 6 and 10-12 stand rejected under 35 USC 103 as being obvious over Olson '734 in view of Droske, US 3,969,915 and Gysin, US 3,264,852. Claim 4 stands rejected under 35 USC 103 as being obvious over Olson '734 in view of Droske, US 3,969,915 and Gysin, US 3,264,852 and further in view of Vonlanthen, US 5,956,986. Claim 9 stands rejected under 35 USC 103 as being obvious over Olson '734 in view of Droske, US 3,969,915 and Gysin, US 3,264,852 and further in view of Widen, US 5,809,816. These rejections are respectfully traversed.

The Droske patent is directed to a conventional lock wherein the tumblers are not side tumblers. More specifically, the tumblers are located centrally and are provided with a central hole through which the key blade extends. See, Figs. 2, 3 and 6. In the Droske patent the contact portions are not in the form of fingers that extend sideways into the key slot. In addition, in the Droske patent the contact portions interact with the upper and lower edges of the key blade and not with a coded surface on a side surface of the key blade. Further, in the Droske patent the side tumblers are not accommodated and guided in side cavities.

The Gysin patent discloses a lock wherein each pair of tumblers includes two body

segments located on opposite sides of the key slot. More specifically, each pair of tumblers are located on a respective side of the key slot, not on the same side thereof. In addition, Gysin does not disclose a pair of adjacent body segments accommodated in an associated side cavity. Further, in the Gysin patent on each side of the key slot the adjacent side tumblers are accommodated and guided in separate side cavities. See, Fig. 4.

The Olson '734 patent is directed to a lock tumbler wherein the key does have a longitudinal groove 25 with two opposite walls being comparable to Applicant's longitudinally extending coded surface. In addition, Olson '734 discloses cavities in the key plug wherein each cavity accommodates a pair of adjacent tumbler segments. However, as indicated above, it is respectfully pointed out that in the Olson '734 patent the body segments include a plate 18 with a longitudinal recess or aperture 20 and a plate 19 with a longitudinal recess or aperture 20. In the Olson '734 patent, the spring 21 is disposed within the recess 20 to connect the plates 18, 19 to each other by use of the spring 21 for pressing the plates 18, 19 outwardly from the plug in opposite directions for locking engagement in the grooves 9 to prevent the rotation of the plug. See, page 2, column 1, lines 1-10 of the Olson '734 patent. Therefore, the plates 18, 19 are moveable only to a certain extent. When the spring 21 is totally compressed, the plates 18, 19 cannot move any further in the same direction. For example, from the position as shown in Fig. 5 of the Olson '734 patent, the plates 18, 19 can move only to a position where the upper and lower ends are flush, but no longer, because the spring 21 will resist further movement.

Further, in the Olson '734 patent the lugs 23 extend into the key-way of the plug to form contact points which are located very close to each other in the axial direction as illustrated in Fig. 6. Note that in Fig. 6 of the Olson '734 patent the relative position of the plates 18, 19 are exactly the same.

Also, in the Olson '734 patent it is stated on page 2, column 1, lines 42-45 that there are basically three plate patterns and that these three patterns can be combined and reversed for making up various combinations. The lugs can be placed:

- in the middle;
- offset toward one end of the plate a short distance; or
- offset a greater distance.

However, the Olson '734 patent does not indicate that the two plates 18, 19 can be displaced relative to each other so as to increase the number of code combinations.

In contradistinction to the subject matter set forth in the Olson '734, Droske and Gysin patents, the present invention is directed to a combination of elements wherein the adjacent side tumbler body segments 113, 114 in the pair are located on the same side of the key slot and are freely movable independently of each other in the side cavity so as to be individually displaced into respective elevational positions. In addition, the contact fingers 115, 116 in the pair are axially separated in the longitudinal direction of the key plug such that these contact portions are located at a longitudinal distance from each other on the same side of the key slot and will be positioned at elevationally specific and generally different

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levels when being engaged by said coded surface (203) upon insertion of said key blade (200) into said key slot (100). Thus, the side tumbler body segments (113, 114) in each pair are displaceable into a number of different positions relative to each other representing different codes.

The Vonlanthen patent was merely relied upon for a teaching of a part-cylindrical shape 10 that is guided by wall portions of the cavities. The Widen '816 patent was merely relied upon for a teaching of a side bar. Since the secondary teachings relied on by the Examiner do not overcome the deficiencies of the primary references, the claims of the present application is not rendered obvious in view of the disclosure as set forth in the prior art relied on in the Examiner's rejections.

NO PROSECUTION HISTORY ESTOPPEL

The Claims have been amended to clarify the claim language. No prosecution history estoppel would apply to the interpretation of the limitations set forth in claims in view of the fact that this subject matter has been continuously presented since the original filing date of the present application.

REQUEST FOR INTERVIEW

If the Examiner has any questions with regard to this application, he is respectfully requested to contact the undersigned at (703) 205-8000 so that an interview can be arranged in connection with this application.

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CONCLUSION

In view of the above remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner, either alone or in combination.

Since the remaining patents cited by the Examiner have not been utilized to reject the claims, but to merely show the state of the art, no comment need be made with respect thereto.

In view of the above amendments and remarks, reconsideration of the rejections and allowance of all of the claims are respectfully requested.

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

A prompt and favorable consideration of this Amendment is respectfully requested.

Pursuant to the provisions of 37 CFR 1.17 and 1.136(a), Applicant respectfully petitions for a three (3) month extension of time for filing a response in connection with the present application. The required fee of \$1,020.00 is attached hereto.

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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By _____


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